- The method of claim 9 wherein the predetermined times are just after the sensor is installed.
 - 11. The method of claim 9 wherein the predetermined times are just after the sensor is installed and stable operation of the burner has been reached.
 - 12. The method of claim 9 wherein the predetermined times are just after a fresh start of the burner.
 - 13. The method of claim 9 wherein the predetermined times are just after a fresh start of the burner and stable operation of the burner has been reached.



- 14. The method of claim 9 wherein the predetermined times are just after reset.
- 15. The method of claim 9 wherein the predetermined times are just after reset and stable operation of the burner has been reached.
- 16. The method of claim 9 wherein the predetermined times are just after the sensor is installed, just after a fresh start of the burner and just after reset.
- 17. The method of claim 16 wherein the predetermined times are just after the sensor is installed, just after a fresh start of the burner and just after reset and after stable operation of the burner has been reached.

- 18. The method of claim 9 wherein the gas-air ratio has an upper limit and when the upper limit is exceeded, the upper limit continues to be used to determine subsequent gas-air ratios above the limit.
- 19. The method of claim 9 wherein the gas-air ratio has a lower limit and when the gas-air ratio falls below the lower limit, the lower limit continues to be used to determine subsequent gas-air ratios below the limit.